

ABSTRACT

A novel UV-excited aluminate phosphor having a homogeneous composition and capable of emitting a strong fluorescence has been developed. A phosphor of the present invention comprises aluminate and other metal components which are combined or doped to aluminate, and is represented by a general composition formula: $7(\text{Sr}_{1-x}\text{Eu}_x)\text{O} \cdot y\text{Al}_2\text{O}_3$, wherein $0 < x \leq 0.5$ and $1 \leq y \leq 36$. A method for efficiently producing the phosphor of the present invention is also disclosed.